

Additions to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A healthcare system for a care-giving facility, comprising:
a plurality of medical devices;
a portable remote user interface;
a hub connected to (i) the plurality of medical devices and (ii) a first central computer;
the first central computer having a first database including patient safety-specific information and a first functional feature set associated with data and functions related to the plurality of medical devices and the portable remote user interface, wherein the plurality of medical devices and the portable remote user interface communicate directly with the hub, and the hub communicates directly with the first central computer;

a second central computer having a second database, wherein the first database is a subset of the second database, and a second functional feature set, wherein the first central computer is securely connected to the second central computer, wherein the plurality of medical devices and the portable remote user interface do not communicate directly with the second central computer, the second central computer sending a signal to the first central computer at designated time intervals causing the subset of data in the first database to synchronize with the corresponding data in the second database, and when critical information in the second database changes which is also part of the first database, causing the information to be relayed immediately to and processed by the first central computer and to be processed as a change in information, not as a replacement of existing information; and

wherein the portable remote user interface can receive data from the second database relating to the second functional feature set of the second central computer through the first central computer.

Claim 2 (original): The healthcare system of claim 1, wherein the first functional feature set comprises at least one of a volumetric infusion pump feature, and a syringe pump feature.

Claim 3 (original): The healthcare system of claim 1, wherein the first functional feature set comprises at least one of a change pump channel feature, an administer infusion feature, a stop or discontinue infusion feature, a resume infusion feature, and a remove pump feature.

Claim 4 (original): The healthcare system of claim 1, wherein the second functional feature set comprises at least one of a patient management feature, an item management feature, a facility management feature, a messaging feature, an alarms/alerts feature, a billing interface feature, a formulary interface feature, a lab results interface feature, an inventory tracking feature, a clinician administration feature, an order entry feature, a pharmacy feature, a user interface feature, a user interface and clinician association feature, a volumetric infusion pump feature, and a syringe pump feature.

Claim 5 (original): The healthcare system of claim 1, wherein the first database comprises at least one of pump data, pump channel data, pump sub-channel data, order data, clinician data, patient data, user interface data, medical device data, hub data, titration data, comparison data, alarm data, escalation data, hub alarm data, pump alarm data, channel alarm data, and alarm history data.

Claim 6 (original): The healthcare system of claim 1, wherein the second database comprises at least one of patient management data, item management data, facility management data, messaging data, alarms/alerts data, inventory tracking data, a clinician administration data, order entry data, user interface and clinician association data.

Claim 7 (original): The healthcare system of claim 1 wherein the first central computer is operably connected to the second computer through at least one of a dedicated TCP/IP hardwired connection, a high speed, low latency virtual private network, and a public or shared infrastructure utilizing encryption through a fiber optic connection, a microware connection, or a high speed wireless connection.

Claim 8 (previously presented): The healthcare system of claim 1, wherein the second central computer sends data from the second database to the first central computer in a first standard protocol, and the first central computer sends the data to the user interface in a second standard protocol.

Claim 9 (previously presented): The healthcare system of claim 1, wherein the second central computer sends second data from the second database to the first central computer, wherein the first central computer combines the second data with first data from the first database with the second data, and wherein the first central computer sends the combined first and second data to the portable remote user interface for display on a display of the portable remote user interface.

Claim 10 (previously presented): The healthcare system of claim 1 further comprising:
a plurality of wireless access points through which the plurality of medical devices and the portable remote user interface communicate with the first central computer.

Claim 11 (original): The healthcare system of claim 1, wherein the first central computer receives second data from the second database in the second central computer for use in a validation procedure.

Claim 12 (original): The healthcare system of claim 11, wherein the validation procedure comprises the steps of receiving an XML document and determining whether the data expected to be received from the XML document is received.

Claim 13 (previously presented): The healthcare system of claim 1, wherein the first central computer receives data from at least one of the portable remote user interface and the plurality of medical devices, and determines whether the received data is valid in order to enable the first central computer to perform a further step.

Claim 14 (previously presented): The healthcare system of claim 1, wherein the first central computer sends operation data from at least one of the first database and the second database to the plurality of medical devices for use in the operation of the plurality of medical devices.

Claim 15 (currently amended): A method for operating a healthcare system in a care-giving facility having a plurality of medical devices, a portable remote user interface, a first central computer storing patient safety-specific information securely connected to a second central computer having a second database including second data, the method comprising the steps of:

the first central computer receiving medical data directly from a plurality of medical devices through a hub connected to the plurality of medical devices, the hub connected to the first central computer;

the first central computer receiving user data from the portable remote user interface through the hub, the hub being connected to the portable remote user interface;

the first central computer securely receiving the second data from the second database, wherein the plurality of medical devices and the portable remote user interface are configured to not communicate directly with the second central computer;

the first central computer retrieving first data from a first database, which is a subset of the second data, the second central computer sending a signal to the first central computer at designated time intervals causing the subset of data in the first database to synchronize with the corresponding data in the second database, and when critical information in the second database changes which is also part of the first database, causing the information to be relayed immediately to and processed by the first central computer and to be processed as a change in information, not as a replacement of existing information; and,

the first central computer utilizing a first functional feature set to process at least one of the first data and the second data.

Claim 16 (canceled).

Claim 17 (previously presented): The method of claim 15 further comprising the step of providing for sending the second data to the portable remote user interface from the first central computer.

Claim 18 (currently amended): A healthcare system for a care-giving facility, comprising:
a plurality of medical devices;
a portable remote user interface;
a hub connected to (i) the plurality of medical devices, (ii) the portable remote user interface, and (iii) a central validation computer;

the central validation computer having a validation database storing patient safety specific information and a first functional feature set associated with data and functions related to the plurality of medical devices and the portable remote user interface, wherein the plurality of medical devices and the portable remote user interface communicate directly with the hub, and the hub communicates directly and securely with the central validation computer;

a second central computer having a second database and a secure connection with the central validation computer, wherein the validation database is a subset of the second database, and a second functional feature set, wherein the plurality of medical devices and the portable remote user interface are configured to not communicate directly with the second central computer, and wherein the portable remote user interface receives data from the second database relating to the second functional feature set of the second central computer through the central validation computer, the second central computer sending a signal to the central validation computer at designated time intervals causing the data in the validation database to synchronize with the corresponding data in the second database, and when critical information in the second database changes which is also part of the validation database, causing the information to be relayed immediately to and processed by the central validation computer and to be processed as a change in information, not as a replacement of existing information.

Claim 19 (original): The healthcare system of claim 18, wherein the central validation computer is securely connected to the second computer.

Claim 20 (canceled).

Claim 21 (original): The healthcare system of claim 18, wherein the central validation computer receives second data from the second database in the second central computer for use in a validation procedure performed by the central validation computer.

Claim 22 (original): There healthcare system of claim 21, wherein the validation procedure comprises the steps of receiving an XML document and determining whether the data expected to be received from the XML document is received.

Claim 23 (previously presented): There healthcare system of claim 21, wherein central validation computer receives first data from at least one of the portable remote user interface and the plurality of medical devices, and wherein the validation procedure comprises the step of determining whether the first data matches the second data.

Claim 24 (currently amended): A healthcare system for a care-giving facility, comprising:
a plurality of medical devices;
a portable remote user interface;
a hub connected to (i) the plurality of medical devices, (ii) the portable remote user interface and (iii) a central validation portion of a central computer;
the central validation portion of the central computer having a validation portion of a database and a first functional feature set associated with the data and functions related to the plurality of medical devices and the portable remote user interface, wherein the plurality of medical devices and the portable remote user interface communicate directly with the hub, and the hub communicates directly and securely with the central validation portion of the central computer; and
a second non-validation portion of the central computer having a second non-validation portion of the database and a second functional feature set, the second non-validation portion of the central computer sharing a server with the central validation portion and separated from the central validation portion by a software firewall, wherein the plurality of medical devices and the portable remote user interface are configured and arranged to not communicate directly with the second non-validation portion of the central computer and wherein the portable remote user interface receives data from the second non-validation portion of the database relating to the second functional feature set of the second non-validation portion of the central computer through the central validation portion of the central computer, the second non-validation portion of the database synchronizing with the validation portion of the database at designated time intervals, and when critical information in the second non-validation portion of the database changes, the critical information being relayed immediately to the validation portion database and being processed as a change in information, not as a replacement of existing information.

Claim 25 (original): The healthcare system of claim 24, wherein the central validated portion of the central computer operates in a first environment running a first operating system, and the second non-validation portion of the central computer operates in a second environment running a second operating system.

Claim 26 (original): The healthcare system of claim 25, wherein the first and second operating systems are separated by a fire wall.

Claim 27 (original): The healthcare system of claim 24, wherein the central computer is a single server.

Claim 28 (original): The healthcare system of claim 24, wherein the central computer comprises a first server and a second separate server, the first and second servers being separated by a fire wall, wherein the central validation portion of the central computer resides in the first server, and wherein the second non-validation portion of the central computer resides on the second server.